Critical Minerals Americas Inc. Announces Updated NI 43-101 Technical Report for the SBH Project, Alberta, which Highlights Historical Metallurgical Recoveries and Historical Mineral Resource Estimates

written by Raj Shah | May 27, 2026

May 27, 2026 (Source) – Critical Minerals Americas Inc. ("CMAI" or the "Company") today highlighted historical metallurgical testing results and historical inferred mineral resource estimates contained in its **updated April 1, 2026, NI 43-101 Technical Report** for the Company's SBH polymetallic black shale critical minerals project located in northeastern Alberta.

See the Technical Report posted on the Company's website: www.criticalmineralsamericas.com

The SBH Project hosts extensive mineralized horizons within the Second White Speckled Shale and Labiche Formations and contains **nine (9) critical minerals** including molybdenum, nickel, uranium, vanadium, zinc, cobalt, lithium, scandium, thorium, and **fourteen (14) rare earth elements ("REEs").**

Conceptual Exploration Targets and Historical Mineral Resources

CMAI previously disclosed:

The Buckton South Exploration Target contains a tonnage range of approximately 10.3 – 15.4 billion tonnes ("**BT**") of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Within this exploration target area, a **historical NI 43-101 compliant Inferred Mineral Resource of 497 million tonnes of metalliferous black shale was defined in 2014 by a previous operator.**

- **The Lower Buckton Target** contains a tonnage range of approximately 2.3 – 3.5 BT of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Within this exploration target area, a portion of historical Buckton Zone that falls within the current SBH Project represents approximately 12.9% **(or 572.8 million tonnes of the historical Buckton Zone historical Mineral Resource that was defined in 2014 by a previous operator).**
- **The Asphalt Exploration Target** contains an exploration tonnage range of approximately 6.9 – 10.3 BT of total black shale material from the combined Labiche, Second White Specks, and Belle Fourche/Shaftesbury formations. Historical drilling took place at the Asphalt target, but a mineral resource was never defined nor disclosed.
- **Primary exploration targets** (Lower Buckton, Buckton South, Asphalt) contain a tonnage range of 19.5 billion to 29.2 billion Tonnes. Total Expansion potential of up to approx. 34.5 BT to 52.2 BT.

The above historical mineral resource estimates on these polymetallic black shale units were completed as Net Smelter Return resource estimates with a US$10/t NSR cut-off range.

The Exploration Targets for the SBH Project were developed by Apex Geoscience Ltd. ("Apex"), an independent geological

consulting firm, using existing historical geological and drilling data, to provide an evaluation of the potential tonnages and grades of mineralized black shale horizons within the SBH Project. These Exploration Tonnage Targets were calculated for the Lower Buckton, Buckton South and Asphalt zones for each of the laterally continuous Labiche, Second White Specks, and the Belle Fourche/Shaftesbury Formations (Table 1).

In accordance with NI 43-101, the potential quantity and grade of the Exploration Targets and historical mineral resource estimate are material in nature. There has been insufficient exploration to define a Mineral Resource, and it is uncertain if further exploration will result in the Exploration Targets being delineated as a Mineral Resource.

Exploration Target Area	Areal Extent (km2)	Formation Thickness (m)		Tonnage range (BT)		Grade Range (in ppm)																			
						Mo		Ni		U		V		Zn		Cu		Co		Th		Sc		Li		TREO	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Lower Buckton	9.6	87.5	131.2	2.3	3.5	1.4	78.4	37.2	152.5	3.5	37.9	173.9	775	96.1	318.3	22.4	89.6	9.6	25.1	8	13.8	9.3	19.2	46.5	88.2	159.9	404.9
Buckton South	66.9	56.1	84.1	10.3	15.4	1.6	73.1	34.7	154.9	3.8	31.4	184.5	907.9	100.8	328.4	24.9	103.6	9.6	25.2	8.3	13.0	9.6	18.8	55.2	114.1	160.8	330.6
Asphalt	47.5	54.3	81.5	6.9	10.3	1.7	91.7	40.0	177.1	4.9	42.8	203.9	829.5	96.9	358.2	25.3	104.5	9.9	28.1	8.4	14.1	10.3	18.8	61.2	116.9	167.9	538.5
Exploration Target total	124.0	66.0	98.9	19.5	29.2	1.6	81.1	37.3	161.5	4.1	37.4	187.4	837.5	97.9	335.0	24.2	99.2	9.7	26.1	8.2	13.6	9.7	18.9	54.3	106.4	162.9	424.7
SBH Property Expansion Potential	**97.9**	**66.0**	**98.9**	15.0	23.0	1.6	81.1	37.3	161.5	4.1	37.4	187.4	837.5	97.9	335.0	24.2	99.2	9.7	26.1	8.2	13.6	9.7	18.9	54.3	106.4	162.9	424.7
Total	221.9			34.48	52.22	1.6	81.1	37.3	161.5	4.1	37.4	187.4	837.5	97.9	335.0	24.2	99.2	9.7	26.1	8.2	13.6	9.7	18.9	54.3	106.4	162.9	424.7

Note: Total Rare Earth Oxides = La2O3 + Ce2O3 + Pr2O3 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb2O3 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3

Table 1. Mineralized Shales Exploration Tonnage Target Sizes (Billions of Tonnes) and grade ranges (in ppm).

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/9351/299098_35cd7f9d14e3a97a_001full.jpg

Cautionary statement on conceptual exploration targets: *The potential quantity and grade of the conceptual exploration targets are conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether further exploration will result in the estimation of a mineral resource. The exploration targets are not, and should not be construed as, a mineral resource or a mineral reserve.*

Historical Buckton South Inferred Mineral Resource

The Company notes that these Mineral Resource estimates are historical in nature and have not yet been verified as current mineral resources by the Company's Qualified Person under NI 43-101 standards. Additional drilling, metallurgical validation, and economic studies are required.

Historical Metallurgical Recovery Results

Historical metallurgical testing programs completed from 2009 to 2014 demonstrated encouraging recoveries for multiple critical metals using bioleaching, acid leaching, and stirred-tank processing technologies.

Bioleaching/Acid Recoveries Test Work

Element	Bioleaching/Acid Recoveries
	2011 R&D
Mo	51%
Ni	89%
U	100%
V	51%
Zn	100%
Co	91%
Cd	100%
Li	58%

The Company believes the historical bioleaching and acid-leaching recoveries demonstrate the potential amenability and ability of a low-energy bio-hydrometallurgical processing approach for the SBH Project.

Strategic Importance of the SBH Project

The SBH Property hosts mineralization in molybdenum, nickel, uranium, vanadium, zinc, copper, cobalt, lithium, scandium, and rare earth elements, each of which appears on Canada's Critical Minerals List (Natural Resources Canada, 2024). The Property comprises approximately 46,666 hectares located approximately 120 kilometres north of Fort McMurray, Alberta

Qualified Person

Daniel Leroux, M.Sc., P.Geo., is a Qualified Person as defined by NI 43-101, and member in good standing with the Professional Geoscientists of Ontario and the Association of Professional Engineers and Geoscientists of Alberta and Saskatchewan respectively. Mr. Leroux has reviewed and approved the technical information in this news release. Mr. Leroux is the Vice President Exploration for CMAI

About Critical Minerals Americas Inc.

Critical Minerals Americas Inc. is a private company engaged in mineral exploration and development in the province of Alberta. CMAI holds a 100% interest in a 466.66 sq kms critical minerals and rare earth elements hosted black shale project called the SBH Project. The Project is located approx. 120 km northwest of Fort McMurray Alberta in the Athabasca region. CMAI is advancing the development of long-term domestic supplies of critical minerals and REEs.

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Cautionary Statement and Forward-Looking Information

This press release contains “forward-looking statements” and/or “forward-looking information” (collectively, “forward-looking statements”) within the meaning of applicable securities legislation. All statements, other than statements of historical fact, are forward-looking statements. The use of any of the words “anticipate”, “plan”, “aim”, “target”, “contemplate”, “continue”, “estimate”, “expect”, “intend”, “propose”, “might”, “may”, “will”, “shall”, “project”, “should”, “could”, “would”, “believe”, “predict”, “forecast”, “pursue”, “potential”, “possible”, “capable” and similar expressions are intended to identify “forward-looking statements”. Forward-looking statements in this press release include, but are not limited to, the use of the proceeds of the Private Placement and the anticipated development and prospective nature of the Company’s property interests.

These forward-looking statements are based on the Company’s current beliefs as well as assumptions made by and information currently available to it and involve inherent risks and uncertainties, both general and specific. Risks exist that forward-looking statements will not be achieved due to a number of factors including, but not limited to, the receipt of applicable shareholder and regulatory approvals, availability of financing, the impact of changes in the laws and regulations regulating mining exploration, development, closure, judicial or regulatory judgments and legal proceedings.

Although management of the Company considers the assumptions contained in forward-looking statements to be reasonable based on information currently available to the Company, those assumptions may prove to be incorrect. When making decisions with respect to the Company, investors and others should not place undue reliance on these statements and should carefully

consider the foregoing factors and other uncertainties and potential events.

The Company does not undertake any obligation to release public revisions to any forward-looking statement to reflect events or circumstances after the date of this release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. Investors should not assume that any lack of update to a previously issued forward-looking statement constitutes a reaffirmation of that statement. Continued reliance on forward-looking statements is at investors’ own risk.